Assessment Brief

Assignment Details

Module Title	Programming for Data Analysis Project
Module Code	B9DA108
Module	Muhammad Asad
Lecturers Year	2024/2025
Stage	MSc
Assessment	Final Project Report and Artefacts
Title	CA 2
Assessment Type Single/Word count	1, 500 Words +/- 10% Use Harvard referencing style this can be found in your module guide You can use any sources from your course material, from google or journals and Article to answer the questions
	40%
	5 th March 2025
Assessment	Project **be submitted via Moodle before midnight 9 April 2025**
Weighting Issued	As indicated below
Hand In Date	
Mode of Submission	

Assessment Overview:

This assessment aims to evaluate your proficiency in programming for data analysis. You will be required to submit the following:

1. Program File (Artefact)
2. Report File
3. Presentation of the Report (PPT)

Submission Requirements:

1. Program File (Code):

- Develop a Python program for data analysis using Google Colab, VScode or Jupyter Notebook.
- Use appropriate Python libraries (e.g., Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn) for data cleaning, manipulation, analysis, and visualization.
- Ensure your code is well-documented with comments explaining each step.

2. Report File:

- Introduction:
    - Briefly describe the purpose of the project.
    - Describe the dataset you have chosen for analysis (Feel free to consult me if you have a challenge selecting a dataset).
    - Clearly state the objectives of your analysis.
- Data Description:
    - Provide a detailed description of the dataset, including the source, type of data, and any relevant features.
- Method of Data Analysis:
    - Explain the methods and techniques you have used for data analysis, including data preprocessing steps, analysis methods, and any algorithms implemented.
- Results:
    - Present the findings of your analysis using appropriate visualizations and summary statistics.
- Discussion:
    - Interpret the results, discussing any patterns, trends, or insights discovered.
    - Discuss any limitations or challenges faced during the analysis.
- Conclusion:
    - Summarize the key findings of your analysis and suggest potential future work.
- References:
    - List all references used in your report (If applicable), using Harvard style references and citation.

3. Presentation:

- Prepare a PowerPoint presentation summarizing your report.
- Your presentation should include:
    - An introduction to the dataset and objectives.
    - Key findings and visualizations from your analysis.
    - Discussion of the results.
    - Conclusion and potential future work.

- You will present your findings to the class in a 10-minute presentation, followed by a Q&A session.

Submission Instructions:
- Program File (Artefact): Submit the Python notebook (.ipynb) file via the provided submission link.
- Report File: Submit a PDF file of your report via the provided submission link.
- Presentation: Be prepared to present your findings on the scheduled date in class.

Important Dates:
- Artefacts and Report Submission Deadline: On or Before 10 April 2025
- Presentation Date: 17th and 18th April 2025 (Group C)

Resources

Software or tools required/ useful: Colab
Templates, files, data tables provided by the lecturer: Moodle resources

Generative Artificial Intelligence Assessment Scale

Can generative AI be utilised in this assignment?

1	2	3	4	5
NO AI	**AI-ASSISTED IDEA GENERATION AND STRUCTURING**	**AI-ASSISTED EDITING**	**AI TASK COMPLETION, HUMAN EVALUATION**	**FULL AI**
The assessment is completed entirely without AI assistance. This level ensures that students rely solely on their knowledge, understanding, and skills. **AI must not be used at any point**	AI can be used in the assessment for brainstorming, creating structures, and generating ideas for improving work. **No AI content is allowed in the final submission.**	AI can be used to make improvements to the clarity or quality of student created work to improve the final output, but no new content can be created using AI. **AI can be used, but your original work with no AI content must be provided in an**	AI is used to complete certain elements of the task, with students providing discussion or commentary on the AI-generated content. This level requires critical engagement with AI generated content and evaluating its output. **You will use AI to complete specified tasks in your assessment. Any AI created content must be cited.**	AI should be used as a 'co-pilot' in order to meet the requirements of the assessment, allowing for a collaborative approach with AI and enhancing creativity. **You may use AI throughout your assessment to support your own work and do not have to specify which content is AI generated**
during the assessment.		**appendix.**		

			The use of AI-generated content is treated in the same manner as the use of any other external resource such as libraries, packages or frameworks. It must be clearly identified and attributed, and credit will be limited to the student's own work, to the exclusion of such resources, except for how students' own code integrates all of these resources. Questions will be asked during the presentation.	

Grading Criteria

Scale	Grade Band	Evaluative Criteria/Performance Level Descriptors (what does performance at this level look like?)				
		Criterion 1 - "*Requirements and Design*"	Criterion 2 - "*Implementation*"	Criterion 3 - "*Documentation*"	Criterion 4 - "*Presentation*"	
Exceptional	90-100%	Comprehensive specification going far beyond required level of detail	Best practice exemplary implementation	Exemplary documentation	Presentation beyond expectations of level	
Outstanding	80-89%	Outstanding specification going beyond required level of detail	Design and implementation of solution exceeds required standard	Outstanding in clarity and content	Outstanding presentation with comprehensive responses to questions	
Excellent	70-79%	Excellent specification of all requirements to a high standard	Excellent solution appropriate for context	Excellent, with no areas of concern	Excellent presentation and responses	
Very Good	60-69%	Very good specification of a full set of requirements	Very good implementation of appropriate solution	Of a generally very high standard, complete coverage of work	Good presentation and adequate responses	
Good	50-59%	Most requirements well specified	Appropriate solution competently implemented	Most operations well documented	Good presentation, but limitations in questioning	
Sufficient	40-49%	Adequate but limited specification, which could include greater detail	Basic functioning storage solution	Some operations could be better documented	Adequate presentation and responses, but could improve	
Somewhat/ Unfulfilled	30-39%	Basic specification of some requirements	Non-functioning or inappropriate storage	Inadequate or incomplete	Poor presentation or responses to questions	
Unfulfilled	0-29%	Absent or poor requirements	Absent or broken	Ad-hoc or absent	Not presented or unable to present competently	
MIMLO Alignment (see Module Guide for Minimum Intended Learning Outcomes for Module)						
MIMLO to which criterion is aligned:	3	3	4	4		

General Requirements for Students:

1.   All assignments must be submitted no later than the stated deadline (date and time).

2.   Assignments submitted after the latest deadline specified (including any approved extension deadline) are considered late and penalised according to the [Quality Assurance Handbook (QAH)](#) **Part B Section 5.2.2.6** as follows:

    a. A penalty of 2 marks will be applied per day or part thereof (including weekends and public holidays) for an ongoing failure to submit beyond the submission deadline.

    b. An examiner has the right to refuse to mark the assignment if the submission instructions have not been observed.

    c. Where a late assessment is submitted within 14 days of the deadline, and is of a passing standard, the late penalty is capped (such that the minimum grade that can be awarded is 40% for the late submission).

    d. Where a late assessment is submitted more than 14 days after the deadline, it will receive 0%. The lecturer may, at their discretion, review the submission for feedback.

    e. Where the assessment is undertaken in a group, the piece of work should be submitted in its complete entirety, and any penalty for late submission incurred applies to all group members.

3.   Extensions to assignment submission deadlines will not be granted, other than in exceptional circumstances. To apply for an extension please go to https://students.dbs.ie/dashboard/SCCM and open a ticket.

4.   All relevant provisions of the Assessment Regulations must be complied with (see [QAH B.5](#)).

    a. Students are required to refer to the assessment regulations in their Programme Handbook, and on the [Student Website](#).

    b. Dublin Business School penalises students who engage in academic impropriety (i.e. plagiarism, collusion and/or copying, ghost writing/ essay mills, improper use of Generative Artificial Intelligence software).

        i. Refer to the College's [Generative AI Guidelines HERE](#) for further information.

    c. Guides on referencing are available on the Library website: https://libguides.dbs.ie/referencing

    d. Text-matching analysis software is integrated in Moodle to generate a report regarding the degree of text-matching in a submission.

5.   Students are required to retain a copy of each assignment submitted, until the issuing of a transcript indicating the mark awarded and the closure of the Appeal period (2 weeks following the release of final results).

    a. Results can only be appealed following the release of final results, and the Appeal form must be submitted to the Exams Office within the Appeal period.

    b. An appeal must be based on valid grounds (see the Appeals Policy QAH B.3.5), dissatisfaction with a grade is not sufficient grounds for an appeal.

    c. Assignments must be appropriately packaged and presented.

    d. All assignments should be submitted to your subject/course page on Moodle by the deadline date.

    e. Where a submission involves digital media (i.e formats other than Word, Powerpoint or PDF), it is the submitting students' responsibility to ensure the media is appropriately labelled, fully working and they must retain a copy[1].

    f. Components of an assessment which are not included in the final submission cannot normally be subsequently accepted for grading. It is the student's responsibility to ensure their file is uploaded correctly.

    g. Include an electronic **cover sheet** with the following details to the front of the assignment (see below)

6.   Assignments that *breach* the word count requirements will be penalised. *There is a 10% discretion, either way, applicable in terms of word count.*

7.   When you submit your assignment you will be asked to click on a button which will declare the following:

> By ticking this box I am confirming that this assignment/exam is all my own work. Any sources used have been referenced.
>
> I have read the College rules regarding plagiarism in the QAH Part B Section 3 and understand that penalties will be applied accordingly if work is found not to be my own. All work uploaded is submitted via Ouriginal, whereby a text-matching report will show any similarities with other texts.

Assignment Cover Sheet

Please fill out and insert at the top of your README or Google Doc as preferred.

Student Name and Number as per student card:

Programme:

Lecturer Name:

Module/Subject Title:

Assignment Title:

By submitting this assignment, I am confirming that:
- **This assignment is all my own work;**
- **Any sources used have been referenced;**
- **I have followed the Generative AI instructions/ scale set out in the Assignment Brief;**
- **I have read the College rules regarding academic integrity in the QAH Part B Section 3, and the Generative AI Guidelines, and understand that penalties will be applied accordingly if work is found not to be my/our own.**
- **I understand that all work submitted may be code-matched report to show any similarities with other work.**

Note: Technical support is available to students between **0830- 2000 hrs (Mon-Fri), 0930-1630 (Sat) only**. There is no technical support after 2000 hrs. It is your responsibility to ensure that you allow time to troubleshoot any technical difficulties by uploading early on the due date.